

**Abstract**

A multi-beam antenna system is described herein that can be used in microwave frequency applications between 1 GHz and 100 GHz. The multi-beam antenna system covers four  
5 90° sectors for full 360° coverage. Each 90° sector is covered with at least 1 narrow steerable transmit (TX) and 1 narrow steerable receive (RX) beam. The beams are steered in the azimuth dimension.